Problem of the Week #2

Due 9/2/11 by 3:15 PM

Turn in to Matt Mistele, Matteo Kruijssen, Mrs. Morin, or the Math Office (Room 211)

Or email to [13mmistele@ransomeverglades.org](mailto:13mmistele@ransomeverglades.org)

This is supposed to be one of the questions for potential Microsoft employees. Microsoft expects you to answer this question in less than 5 minutes!

“We Were Promised Jetpacks” has a concert that starts in 18 minutes and the group members must all cross a bridge to get there. All four men begin on the same side of the bridge. You must help them across to the other side. It is night. There is one flashlight. A maximum of two people can cross at one time. Any party who crosses, either one or two people, must have the flashlight to see. The flashlight must be walked back and forth; it cannot be thrown, etc. Each band member walks at a different speed. A pair must walk together at the rate of the slower man's pace, based on this information:

\*Adam Thompson - 1 minute to cross

\*Michael Palmer - 2 minutes to cross

\*Sean Smith - 5 minutes to cross

\*Darren Lackie - 10 minutes to cross

For example, if Adam and Darren walk across first, 10 minutes have elapsed when they get to the other side of the bridge. If Darren then returns with the flashlight, a total of 20 minutes will have passed and you will have failed. How do you get them all across in time for the concert, with no less than a minute to spare? (List who goes in each step)